

JANIS 75

CHAPTER XIII

DOCUMENT NO. 13
NO CHANGE IN CLASS ☐
☒ DECLASSIFIED
CLASS. CHANGED TO: T6 S C
NEXT REVIEW DATE: 14 07 80
DATE 14 07 80 REVIEWER:

~~Confidential~~
Non-registered

25X1



JOINT ARMY-NAVY INTELLIGENCE STUDY

OF

KOREA

(INCLUDING TSUSHIMA AND QUELPART)

NAVAL FACILITIES

APRIL 1945

List of Effective Pages, Chapter XIII

SUBJECT MATTER	CHANGE IN EFFECT	PAGE NUMBERS
Cover Page	Original	unnumbered
List of Effective Pages and Table of Contents, Chapter XIII (inside front cover)	Original	unnumbered
Text and Figures	Original	pp. XIII-1 to XIII-4
Figure (insert, reverse blank)	Original	Figure XIII-2
Text	Original	pp. XIII-5 to XIII-8
Figure (insert, reverse blank)	Original	Figure XIII-3
Imprint (inside back cover, reverse blank)	Original	unnumbered

Table of Contents

Note: This chapter is based upon information available in Washington, D. C., on 1 March 1945.

	Page		Page
130. INTRODUCTION	XIII - 1	D. Chinkai Naval Station	XIII - 3
131. ORGANIZATION	XIII - 1	(1) General description	XIII - 3
A. Administration	XIII - 1	(2) Harbor	XIII - 3
(1) Guard districts	XIII - 1	(3) Entrance channels	XIII - 4
(2) Functions	XIII - 1	(4) Anchorages	XIII - 5
(3) Command	XIII - 1	(5) Naval loading and unloading facilities	XIII - 5
B. Normal distribution of forces	XIII - 1	(6) Storage facilities	XIII - 5
(1) Sea forces	XIII - 1	(7) Supplies	XIII - 5
(2) Land forces	XIII - 2	(8) Facilities for clearing port	XIII - 5
(3) Air forces	XIII - 2	(9) Shipyard and repair facilities	XIII - 5
132. SUPPLY AND MAINTENANCE	XIII - 2	(10) Naval factories	XIII - 6
A. Depots	XIII - 2	(11) Other naval establishments	XIII - 6
B. Shipbuilding and repair facilities	XIII - 2	(12) Personnel	XIII - 6
133. NAVAL BASES AND STATIONS	XIII - 2	(13) Vulnerability	XIII - 6
A. Rashin Naval Station	XIII - 2	E. Inch'on (Jinsen)	XIII - 6
(1) General description	XIII - 2	(1) General description	XIII - 6
(2) Naval harbor and anchorage	XIII - 2	(2) Supplies	XIII - 6
(3) Supplies	XIII - 2	(3) Naval facilities	XIII - 6
(4) Munitions	XIII - 2	F. Chinnamp'o (Chinnampo)	XIII - 6
(5) Additional naval establishments	XIII - 3	(1) General description	XIII - 6
(6) Personnel	XIII - 3	(2) Naval facilities	XIII - 6
B. Wonsan (Genzan)	XIII - 3	134. POTENTIAL NAVAL FACILITIES	XIII - 6
(1) General description	XIII - 3	A. Unggi (Yuki)	XIII - 6
(2) Naval facilities	XIII - 3	B. Ch'ongjin	XIII - 6
C. Takeshiki	XIII - 3	C. P'ohang-dong (Hoko-to)	XIII - 6
(1) General description	XIII - 3	D. Pusan (Fusan)	XIII - 6
(2) Entrances and anchorages	XIII - 3	E. Yosu (Reisui)	XIII - 7
(3) Naval installations	XIII - 3	F. Cheju-do (Saishu-to)	XIII - 7
		G. Mok'po (Moppo)	XIII - 7
		H. Paengyong-do (Hakurei-to)	XIII - 7
		I. Kyomip'o (Kenjiho)	XIII - 7
		J. P'yongyang (Heijo)	XIII - 7
		K. Taedasa-do (Daitasa-to)	XIII - 7
		135. PRINCIPAL SOURCES	XIII - 7

~~Confidential~~

Chapter XIII

Page XIII - 1

NAVAL FACILITIES

130. Introduction

Information at present available does not give much confirmation to the many reports of a general development of naval facilities in Korea. What development has taken place seems to be concentrated largely in the two naval stations of Chinkai and Rashin. Other facilities, usually minor in scope, are found at various ports along the coasts of Korea. These include fuel depots, submarine bases, naval air stations, and others. Information concerning these is meager and in many cases amounts to no more than mere rumor.

In this chapter will be found a discussion of the naval organization of Korea (Topic 131); an indication of the naval supplies available in Korea, and of the negligible facilities for fleet repair (Topic 132); and a description of the various naval stations, bases, and other installations, whose existence has been established, or concerning which there are unconfirmed reports (Topics 133 and 134).

131. Organization

A. Administration.

(1) *Guard districts.*

For purposes of naval administration the Japanese Empire is divided into 4 major units called naval districts, all of which have headquarters in Japan proper, and 7 minor but relatively autonomous units called guard districts, all but 2 of which are in outlying regions of the empire. Korea has two of these guard districts, the Chinkai Guard District, and the Rashin* Guard District (FIGURE XIII - 2). The former of these is the most important and includes the southern coast of Korea, from a point just below the 36th parallel, and the entire western coast. Off the southeast coast the district embraces the important channels of Chōsen-kaikyō and Tsushima-kaikyō. To the south it includes the island of Cheju-do (Saishū-tō) and extends to a point below Sasebo. To the west it extends to a line about midway between Korea and the Shantung Peninsula. The Rashin Guard District includes the eastern coast from a point just north of the 36th parallel to a position beyond Najin (Rashin) and Unggi (Yūki) and embraces the water area bounded by a line running south from Najin to a point just off the coast of Honshū.

(2) *Functions.*

The functions of the naval guard districts are, roughly speaking, the same as those of the naval districts. These functions fall into 4 main types: coordination of all naval activities, maintenance of the fleet, defense, and naval training. The two Korean Guard Districts, while much more restricted in their activities than the naval and guard districts of the mainland, carry out all these functions in some degree.

* The guard districts, being divisions set up by the Japanese Navy, are given their Japanese names. However, when the towns themselves are referred to, Korean will be used.

(a) *Coordination.* In each of the guard districts there is a headquarters which has under its jurisdiction any navy yards, submarine or destroyer bases, and fueling depots within its area. It directs all other shore-based activities such as naval aviation, shore defense from sea and air attack, naval training, and medical activities and has supervision of the fleet units permanently based in its district as well as of all personnel whether engaged in sea or land activities.

(b) *Maintenance.* Each guard district provides, in greater or less degree, fuel for naval vessels, supplies of all types, fleet anchorages, and facilities for repairs.

(c) *Defense.* The primary function of the guard districts, particularly of the two in Korea, is the protection of the sea and air frontiers of the empire. This function is carried out by small fleet units called guard divisions, defense divisions, patrol divisions, mine divisions, picket boat divisions, and perhaps submarine divisions (Topic 131, B). The defense responsibility is also shared by naval air stations within the districts, by various strategically located defense stations provided with coast artillery and antiaircraft guns, and by numerous lookout stations (Chapter XII).

(d) *Naval training.* The Korean Guard Districts conduct some small-scale training activities. More important, however, they have probably assumed responsibility for the recruiting of the Koreans now being used by the Japanese Navy.

(3) *Command.*

The guard district is directed by a commander in chief who in matters concerning war plans and operations, is subordinate to the chief of the naval general staff, and in the administrative channel, is under the minister of the navy. This commander in chief has the rank of vice-admiral. He is also commandant of the main naval base of the district and of the district headquarters located there. At present a commander in chief of a guard district is in the same echelon of command as the commander in chief of a naval district. Before 1936 the guard districts were under the jurisdiction of the naval districts to which they were contiguous.

B. Normal distribution of forces.

(1) *Sea forces.*

The sea forces which are permanently attached to guard districts are smaller than the comparable units which are stationed at the main naval districts. Though available information concerning the two Korean guard districts is sketchy, their forces are thought to include the following small fleet units: guard divisions, defense divisions, patrol divisions, minelayer divisions, picket-boat divisions, and possibly submarine divisions. Identified forces attached to the Korean Guard Districts are shown in TABLE XIII - 1.

(a) *Guard divisions.* The guard division, usually with converted tuna-fishing boats among its components, has as its main purpose the protection of harbors and coastal installations.

(b) *Defense division.* This unit is made up of destroyers and smaller vessels, such as torpedo boats, converted gunboats, and similar vessels. It operates further offshore than the guard division.

(c) *Patrol division.* This division, composed of small miscellaneous craft, is used primarily for patrolling coastal waters.

(d) *Minelayer division.* This unit, as its name indicates, is composed of minelayers.

(e) *Picket-boat division.* Generally made up of fishing vessels equipped with radio, armed with light machine guns, and manned by a crew of about fifteen, the picket-boat division operates far offshore.

(f) *Submarine division.* Available information makes it extremely doubtful whether any division composed of submarines is permanently stationed in Korea.

(2) Land forces.

The land force is the tactical name applied to the various naval units assigned to guard duties on land. It includes the units manning the naval fortresses, fortified zones, lookout stations, defense stations, and anti-aircraft and regular batteries, as well as those doing sentry duty as various naval establishments.

(3) Air forces.

Aviation units are associated with each of the guard districts and exist, not only at the naval stations which are the headquarters of the guard districts, but in various other strategic points within the districts.

TABLE XIII - 1

FORCES ATTACHED TO THE GUARD DISTRICTS IN KOREA

GUARD DISTRICT	SEA	LAND	AIR	TOTAL SHORE BASED PERSONNEL
Chinkai	Chinkai Guard Division Chinkai Defense Division Minelayer division	21 defense stations 29 lookout stations	Chinkai Naval Air Station, and others	860 (naval officers and men) and 450 workmen
Rashin	Rashin Guard Division Rashin Defense Division Patrol division Picket-boat division	Fortified zones at Rashin and Wonsan (Genzan). Fire defense stations	Genzan Naval Air Station, and others	865 (naval officers and men).

132. Supply and Maintenance

A. Depots.

Information concerning naval supplies of coal and oil is extremely scarce. The principal supply bases are probably at the Chinkai and Rashin Naval Stations, at Chinnamp'o, and at Wonsan. At Chinkai there is a known oil storage estimated at 50,000 long tons and an additional supply of unknown quantity. No information is available concerning the amount of coal. Nothing is known as to the size of either the oil or coal supplies at Rashin. Chinnamp'o is the principal naval coal depot on the west coast of Korea and has a supply reported to be 103,320 long tons (105,000 metric tons). It appears to have no large supply of oil. Wonsan has supplies of coal and oil, and there is

a small naval coal storage at Inch'on. In addition to these specifically naval supplies, the coal and oil stored at the various commercial ports would be available for naval use (Chapter VI).

B. Shipbuilding and repair facilities.

There is only one known naval dockyard in Korea and this is located at the Chinkai Naval Station. It is reported to be a minor repair base for destroyers and minelayers, and possibly also for larger vessels. It builds small craft up to 150 tons. Available commercial facilities are described in Chapter VI.

133. Naval Bases and Stations

Location of naval bases and stations in the area are shown on FIGURE XIII - 2.

A. Rashin Naval Station.

(42° 13' N, 130° 18' E)

(1) General description.

The Rashin Naval Station is located in the vicinity of the city of Najin (Rashin). It is headquarters of the Rashin Guard District established in 1940. There is little information on the naval facilities which probably have been developed in this region since that time. The station is known to include a small naval base with facilities for submarines and seaplanes, and to have a patrol division, a picket-boat division, and a small guard division (?) permanently attached. It has one of the principal naval coal and fuel oil depots in Korea. (Details of port facilities will be found in Chapter VI, 61, B).

(2) Naval harbor and anchorage.

The harbor used by the naval base is reported to be in either or both Yujin-p'o (Yushin-ho) or Pangjin-man, the small inlets west of Taech'o-do. The former, which is the larger (about 1¼ miles long and ¾ mile wide), is well-protected and has fair holding ground with depths of 7 fathoms in the center, shoaling off to two or three fathoms near the shore. The anchorages for the permanent fleet units are in this inlet. These vessels include a picket-boat division of 7 or 8 boats (approximately 100-tons displacement), a patrol division of like number (300-tons displacement), a small guard division (?), and 2 converted minesweepers. A mole (dimensions unknown) for the use of submarines and seaplanes is reported to extend into the inlet. Pangjin-man (about ½ mile wide and ½ mile long) provides well-protected anchorages over fine sand in depths from 1½ to 5 fathoms. The principal shore installations of the base are located on the peninsula between these two inlets.

(3) Supplies.

In addition to the oil supply maintained at Najin for commercial purposes (Chapter VI, 61, B, (7)), an unknown number of oil-storage tanks, probably for naval use, are at the old village of Najin-dong on the east coast, near the entrance to Najin-man. Specific information concerning the naval coal supply is not available.

(4) Munitions.

There are reported to be an unknown number of concrete munitions warehouses at the naval base. They are probably used for the storage of depth charges and ammunition.

(5) Additional naval establishments.

The headquarters for the guard district is located in a group of multistoried brick buildings, extending for several blocks, about 300 yards behind the main piers in Najin Harbor. The port director's office, under the jurisdiction of the commander of the naval district, is located in the same area.

Barracks in the headquarters area are reported to accommodate 100,000 men. Naval barracks are said to be located at the old town of Najin-dong.

A two-story, ferroconcrete barracks building (33 feet by 61 feet), reported to house the guard division personnel, is located about 3 miles south of the city on the western shore of the bay. A two-story, wood, combination commissary-barracks (20 feet by 49 feet) is in the same area.

(6) Personnel.

The patrol division was reported, in August 1943, to have personnel totaling 65 officers and warrant officers, and 500 enlisted men. The defense division has 300 men attached.

B. Wonsan (Genzan).

(39° 10' N, 127° 26' E)

(1) General description.

In spite of various reports to the contrary it does not appear that a large development of naval facilities has taken place at Wonsan. It does, however, possess a fine natural harbor which can provide unlimited anchorages for all types of naval vessels, and a supply of fuel oil and coal (Chapter VI, 61, F, 5) which is reported to be used by the Navy. A naval air station with landing strips and a probable seaplane anchorage are located on the west side of Wonsan-hang. Further information concerning naval facilities is very sketchy. (Port facilities are discussed in Chapter VI, F).

(2) Naval facilities.

(a) *Submarine base.* A submarine base and other naval installations reported to be at Wonsan may be located on the west side of Hamqumi-man (Kankōbi-wan). Aerial photographs eliminate the possibility of a submarine base being located in the small bay at the northwest end of the peninsula of Kalma-gak. There is also little probability of its being, as reported, on the island of Ung-do at the entrance to Yonghung-man.

(b) *Barracks.* A large building (1,500 feet long and 650 feet wide), located behind the south end of the harbor, is reported to be a naval barracks with a capacity of 20,000 persons.

(c) *Mine storage.* There is an unconfirmed report of a naval mine-storage area north of Wonsan.

C. Takeshiki.

(34° 18' N, 129° 18' E)

(1) General description.

Takeshiki, on the northern end of Shimono-shima which constitutes the lower half of Tsushima, was once a minor Japanese Naval Base. It was reported abandoned in 1916 and if the meager evidence available can be relied upon it has never been reestablished. However, in view of the strategic importance of Tsushima because of its position controlling the entrance to the Sea of Japan, and in the light of the excellent natural harbor

facilities in the Takeshiki area, it seems reasonable to suppose that the naval base has been reestablished and possibly enlarged.

(2) Entrances and anchorages.

Takeshiki is approached by way of Aso-wan (Bay), a spacious inlet with a navigable entrance of something less than a mile wide. Branching off the main bay are a number of arms forming small harbors and basins almost completely landlocked and well sheltered from all winds. The total area of the bay is over 10 square miles, and the water is deep, depths of over 20 fathoms being usual. At the east end of this bay and north of the irregular Shimayama-jima are numerous other completely protected, deep-water anchorages.

The harbor proper of Takeshiki is entered by way of a narrow 900-foot channel separating the highly indented peninsula of Imo Saki from the irregular Shimayama-jima. Except for several shoals and rocks the harbor is deep and covers an area of about 3 square miles. The naval station and the town of Takeshiki are located on a narrow bow-shaped bay about ¾ mile long. Small craft can enter the harbor from the east by means of a canal 200 yards long and 20 feet wide, with depths of 4 feet.

(3) Naval installations.

Assuming that the naval base has been reactivated, nothing concerning it is known. It was once reported to have facilities capable of making minor repairs to destroyers and other small vessels. There are also unconfirmed reports of warehouses and fuel supplies.

D. Chinkai Naval Station.

(35° 08' N, 128° 40' E)

(1) General description.

The Chinkai Naval Station, headquarters for the Chinkai Guard District, is the most important naval base in Korea. It has protected anchorages for a fleet of any size, and it serves as a small destroyer-and-mining base. It is the location of a naval air station and a submarine base is also reported to be in the vicinity. Its known facilities include coal and fuel oil depots, and a dockyard equipped for making minor repairs on warships. There are strong indications that these facilities have been increased since the beginning of the war. Chinkai is especially well located to base a fleet operating in the Korea Strait.

The naval station is just west of the town of Chinhae, a small commercial port with a population reported as 26,000 in 1938. It is situated in the highly indented coast line of the mainland which forms the north side of an almost entirely landlocked area of water made up of Pudo-sudo (channel), Haengam-man, Masan-man and Chinhae-man (FIGURE XIII-1). This body of water (about 19 miles long from the southwest end of Chinhae-man to the entrance of Haengam-man and about 13 miles wide at the widest point in Chinhae-man) is enclosed on the south by the very irregular, comparatively large island of Kōje-do and the small island of Kadok-to. The main entrance to the station is by way of Kadok-sudo, located between these two islands.

(2) Harbor.

The naval harbor of Chinhae is divided into 3 districts. The first district, comprising the naval station proper, is enclosed by a line about 2,280 yards long, running from the south side of Chon-san to the mole at the western end of the naval station.

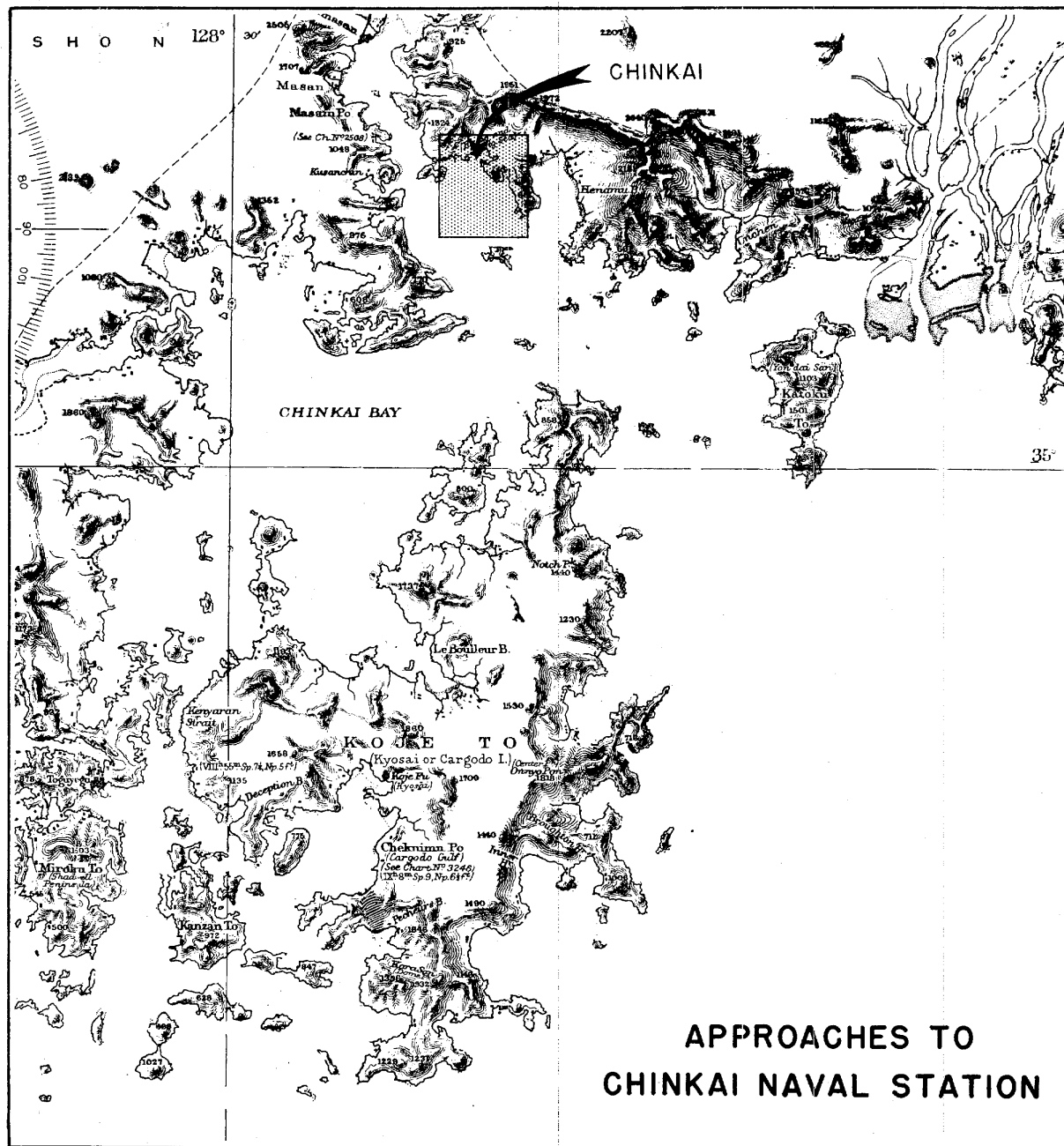


FIGURE XIII - 1. Southern Korea.
Approaches to Chinkai Naval Station

The second district is bounded on the east by Chibuk-mal on the island of Somo-do, and by Tok-so on the mainland. (FIGURE XIII - 2) The third district includes roughly the area between the parallels of $34^{\circ} 40'$ and $35^{\circ} 15' N$ and the meridians of $128^{\circ} 17'$ and $129^{\circ} 10' E$ and contains the island of Koje-do, Basan-man, Chinhae-man, and the city of Pusan.

(3) Entrance channels.

The approach to the Chinkai Naval Station is through Kadok-sudo and from there by way of Pudo-sudo into the first

and second districts of the harbor (FIGURE XIII - 1). The best and widest route through Kadok-sudo lies between the northeastern side of Pyongsan-yolso (Heizan-ressho) and the western side of Kadok-to. The fairway is deep and free from dangers. The channel between the eastern side of Che-do and the southwestern side of Pyongsan-yolso is not recommended because of the 3-fathom rock lying in the fairway. There is a deep and safe channel around the northeastern end of Koje-do, but the fairway is only about 3 cables (720 yards) wide. Pudo-sudo is entered from the southeast between Ha-do and

~~Confidential~~

NAVAL FACILITIES

Page XIII - 5

Chidori Island, the western extreme of which is situated about $1\frac{3}{4}$ miles east-northeastward of Ha-do.

The main entrance to Chinhae-man, in the third district, is through the deep water on either side of Ha-do, the southern end of which is about $9\frac{1}{4}$ cables (2,220 yards) north of the northern extreme of Koje-do. Hyonnaeryang-haehyop (Kennairyo-kaikyō), the narrow channel leading into the southern end of Chinhae-man, and having a least width of one cable (720 feet) and a least depth of $1\frac{3}{4}$ fathoms, is available only for small vessels with local knowledge.

(4) Anchorages.

The first district, at its northern end, is divided into 3 small harbors. The easternmost is an enclosed natural basin, the center one is protected by a breakwater about 280 yards in length, and the westernmost is a basin (about 500 yards by 350 yards), faced with rock on the shore side and protected by a stone breakwater on the harbor side. The western harbor provides anchorage for 8 vessels of the destroyer class, and it is reported that two mine layers and several destroyers and mine sweepers are usually stationed here. Just south of the harbor master's office are 4 top-shaped mooring buoys for destroyers. Near the oil tanks on the east side of the district are 2 mooring buoys for oil tankers; these weigh 12.8 tons and have 8-ton weights and 12-ton anchors attached.

In the second district, which is well protected and has depths averaging 6 fathoms, there are reported to be 31 mooring buoys for destroyers and smaller vessels. Off the south shore of Somo-do are 3 top-shaped mooring buoys of 12 tons each, with 8-ton weights and 12-ton anchors; these are probably used for oil tankers. Small boats may anchor in the northwest corner of Pu-do where there is an inlet, well protected from the wind and having depths of 5 fathoms. Two other moorings for small boats are located north of Taeryul-to.

In the third district, Chinhae-man provides the principal anchorage area of the naval station. Well protected anchorages for all types of vessels, in depths of 7 to 12 fathoms over mud, are almost unlimited in number.

Other good anchorages with mud bottom are available in 3 additional areas of this district. In Kadok-sudo, which is about 4 miles wide at the entrance, between Kadok-to and Koje-do, and about 10 miles long, the depths vary from 11 to 20 fathoms, shoaling to 6 or 7 fathoms near the shores. In the upper end of the channel, northward of the western extremity of Ch'ori-do (Sōri-tō), anchorages in 5 fathoms with protection from seaward are available. Pudo-sudo, with depths varying from 5 to 7 fathoms is another area suitable for anchorage. On the northeastern side of this channel, Haengam-man, the harbor for the town of Chinhae, provides anchorages in depths of between 3 and 5 fathoms. In Masan-man, at the end of the channel, the anchorage area has depths of from 4 to 8 fathoms.

(5) Naval loading and unloading facilities.

In the central harbor of the first district is a 150-foot landing pier, and to the east of this a small pier projects from the 320-yard, stone-faced quay (FIGURE XIII - 3). The built-up peninsula, on which the harbor master's office is located, is quayed, and the wharves, equipped with cranes, are used exclusively for naval purposes. On the south shore of Somo-do is a wharf suitable for the alongside-docking of one oil tanker under 10,000 tons. Another wharf with the same capacity is located near the

oil tanks on the eastern basin of the harbor. On the east side of Chaedung-man is a small mole about 60 feet wide and 70 feet long with a pier about 50 feet in length at its end. Depths leading to the pier are $2\frac{3}{4}$ fathoms. In the northwest corner of Haengam-man are two stone-faced moles. The eastern one, about 150 yards wide and 90 yards long, has a pier about 120 yards long projecting from the center. It is served by a railroad spur and is used exclusively for freight unloading. The western mole has 2 piers, one about 75 yards long and the other about 35 yards long. From this mole the western side of the bay is quayed for a distance of about 650 yards.

(6) Storage facilities.

Warehouses for the storage of munitions are all located in the vicinity of the westernmost of the three basins (FIGURE XIII - 3). There are at least 6 of these, constructed of wood or brick, and containing stores of mines, and mine-laying and mine-sweeping equipment. Underground magazines have also been reported in this area.

(7) Supplies.

(a) *Water.* There are 2 reservoirs which provide water for the naval base and presumably for the town as well. The larger of these, lying 10 miles to the northeast, has a capacity of 739,968 long tons (752,000 metric tons). The other, together with a water-pumping station, is located near the oil tanks adjacent to the eastern basin (FIGURE XIII - 3); it is said to have a capacity of 4,920 long tons (5,000 metric tons).

(b) *Fuel.* A coal supply of unknown quantity is maintained near the pier in the middle basin (FIGURE XIII - 3).

The principal oil storage is found on the south side of the eastern basin and it is composed of 8 tanks with a capacity of 7,000 to 8,000 tons each (FIGURE XIII - 3). The oil-pumping plant is probably in the same building with the water-pumping equipment. Near the tanks are 2 white, circular containers for fire-extinguishing chemicals. An unknown number of tanks for heavy oil are located on the south side of Somo-do (FIGURE XIII - 3).

(c) *Electricity.* The naval base normally receives its power from the town supply, but there is an emergency unit for the dockyard consisting of 2 Ikegai diesel generators of 8,000-kilo-watt capacity. Ordinarily these are run only once a month for trial.

(8) Facilities for clearing port.

(a) *Railroad.* Chinhae is connected with the Korean railway system at Ch'angwon, about 9 miles to the north. Here it meets the single-track, branch-line running to Masan and west from Samnangjin. The latter is on the double-track, trunk line going north from Pusan.

(b) *Road.* A primary highway follows the railroad north to Ch'angwon where it joins the primary highway between Samnangjin and Masan.

(9) Shipyard and repair facilities.

The Chinkai Dockyard functions largely as a minor repair base for destroyers and mine layers, though it may also do small repair work on larger vessels. According to the inadequate information available there are construction facilities only for small vessels up to 150 tons. There is ample room for the expansion of the building-and-repair facilities, and there are some indications that this has been done.

There is one floating drydock of 2,000 tons capacity, reported to be obsolete, and there are two or more small slips (FIGURE XIII - 3). One floating crane of 50 tons capacity is reported. A carpenter shop, machine shop, electric shop, and 2 sheds for machine oil, all small, are said to be located behind the harbor basin west of the dockyard.

(10) Naval factories.

Machine shops, a brass-and-iron foundry, a boiler shop, and a plate-and-blacksmith shop, none large, are located in the dockyard, east of the pier. These contain facilities for the construction of internal-combustion engines and of parts of both steam-reciprocating engines and boilers. The foundry produces castings up to one ton, and the heaviest steel hammer in the forge shop is reported to be 1/2 ton.

Reports indicate that a torpedo-loading plant and arsenal may be in operation in the vicinity of Chinhae, though nothing further is known concerning them.

(11) Other naval establishments.

(a) *Radio station.* The radio station is located on the top of the western knoll of the little peninsula separating the dockyard from the western basin. The two masts, supporting 3 antennae, are 180 feet high and 180 yards apart. The power is reported to be 6-kilowatt spark. This station is in communication with Sasebo and Kure. Other radio towers are located in the hills behind the eastern half of the dockyard (FIGURE XIII - 3).

(b) *Hospital.* A well-equipped hospital, with an estimated capacity of 50 beds, is situated west of the headquarters building.

(c) *Miscellaneous.* The headquarters building of the guard district and the barracks for the guard division are in the foothills behind the western basin. A land defense unit, a construction unit, and the harbor master's office are located on the peninsula forming the west side of the navy yard. These and a naval club, 2 buildings containing naval officers' quarters, and various officers' residences are shown on FIGURE XIII - 3. There is also an unlocated supply department.

(12) Personnel.

In 1937 it was established that the total naval personnel of the station was about 50 commissioned officers, 10 warrant officers, and 800 enlisted men. Current figures are not available. In addition there are said to be at most 450 workmen attached to the naval station.

(13) Vulnerability.

Because of its inland, protected location, Chinkai could be defended from attack by sea with relative ease. Probably only an air attack would be feasible. Nothing is known concerning antiaircraft defense. The Chinkai Naval Air Station is located on the shore of the peninsula west of Kotchuri-san.

E. Inch'on (Jinsen).

(37° 28' N, 126° 37' E)

(1) General description.

Inch'on has been reported to be one of the principal naval coal-and-oil fuel depots in Korea. However, in addition to the approximately 21,000 barrels of fuel and diesel oil and the 2,000 tons of coal, all of which are used for commercial purposes (Chapter VI, 61, M), available evidence indicates noth-

ing more than a small naval coal storage. Other naval facilities are meager. The 30-foot tidal range rules out the possibility of submarines anchoring in the harbor and the outer roads are unfeasible for this purpose on account of the strong tidal current. (Port facilities are described in Chapter VI, 61, M.)

(2) Supplies.

The small naval coal storage is located on the northwest neck of Wolmi-do.

(3) Naval facilities.

Naval ammunition storage and a naval training school of unknown type are located on Wolmi-do.

F. Chinnamp'o (Chinnampo).

(38° 43' N, 125° 25' E)

(1) General description.

Chinnamp'o is the location of the principal naval coal depot on the west coast of Korea. The supply of coal for naval purposes is reported to be 103,320 long tons (105,000 metric tons). The supply of oil is small and reports that it is used by the Navy do not seem to be borne out. (Port facilities are discussed in Chapter VI, 61, J.)

(2) Naval facilities.

Recent unconfirmed reports indicate that fortifications and naval installations, including a submarine base, may be under construction at the mouth of the Taedong River, west of Chinnamp'o. Other reports indicate that the submarine base is south of the city.

134. Potential Naval Facilities

A. Unggi (Yūki).

(42° 20' N, 130° 24' E)

A submarine base, about which nothing is known, is reported to be here. (Port facilities are described in Chapter VI, 61, A.)

B. Ch'ongjin (Seishin).

(41° 46' N, 129° 49' E)

Ch'ongjin, center of the sardine oil-manufacturing industry which produces glycerine for explosives, is rumored to be a submarine base. (Port facilities are described in Chapter VI, 61, C.)

C. P'ohang-dong (Hokō-dō).

(36° 03' N, 129° 22' E)

Japanese destroyers have been known to use the anchorage adjacent to this port in Yongil-man. An unconfirmed report states that a submarine base is located somewhere in this bay. (Port facilities are described in Chapter VI, 62.)

D. Pusan (Fusan).

(35° 06' N, 129° 02' E)

The harbor of Pusan can accommodate cruisers and several capital ships. It is reported to be used by the Japanese as an assembly point for convoys. There is considerable oil storage, a small supply of coal, and facilities for minor ship repair work, all for commercial use. No specifically naval installations have

been identified. (Port facilities are discussed in Chapter VI, 61, G.)

E. Yosu (Reisui).

(34° 44' N, 127° 45' E)

Naval facilities, about which nothing is known, are reported to have been constructed here. (Port facilities are discussed in Chapter VI, 62, J.)

F. Cheju-do (Saishu-to).

(33° 24' N, 126° 34' E)

Information concerning naval installations on this island is extremely scant. Its strategic location between the approaches both to the Sea of Japan and the Yellow Sea, however, would suggest that some facilities have been constructed. Several reports indicate the possibility of a small naval base with repair facilities, and a submarine base, being located near the eastern end of the island. (Port facilities are discussed in Chapter VI, 63.)

G. Mok'po (Moppo).

(34° 47' N, 126° 23' E)

Japanese destroyers and seaplanes have been known to use this harbor and there are indications of some recent development of naval facilities. Extensive naval maneuvers among the islands in this region have been reported. (Port facilities are discussed in Chapter VI, 62.)

H. Paengyong-do (Hakurei-tō).

(37° 57' N, 124° 40' E)

There are unconfirmed reports of naval installations on the group of three islands off the west coast of Korea just south of the 38th parallel. On Soch'ong-do, the southernmost and smallest (about 2¾ miles long) of the three, there may be a small naval base and possibly a submarine base. The island is also said to be well fortified. There is some possibility of a small naval base on Paengnyong-do, the northernmost of the islands.

I. Kyomip'o (Kenjiho).

(38° 45' N, 125° 38' E)

The Japan Iron Works, largest producer of iron and steel in Korea, has facilities for making steel plates and sections for warships and is probably engaged in this work. There are unconfirmed reports of a submarine base in this region. (Port facilities are described in Chapter VI, 62.)

J. P'yongyang (Heijō).

(39° 00' N, 125° 45' E)

Naval coal mines are located near P'yongyang, the large inland city northeast of Chinnamp'o. The mines, six in number, extend in a northeasterly direction from a point east of P'yongyang. The coal is probably being used by naval auxiliaries and other coal-burning vessels.

K. Taedasa-do (Daitasa-tō).

(39° 48' N, 124° 25' E)

Little information is available concerning the naval facilities in this important new port. A naval base is reported to have been

established here. (Port facilities are described in Chapter VI, 62.)

135. Principal Sources

1. Allied Translator and Interpreter Section, Southwest Pacific Area. 1925 Oct. 1944. BULLETIN NO. 1518: PRELIMINARY EXAMINATION OF DOCUMENTS. pp. 6-9. (Confidential).
2. Anonymous. 11 May 1934. ORE-LOADING ROPEWAY IN KOREA. Engineering, Vol. 137, pp. 539-540.
3. Great Britain, Admiralty, Hydrographic Department. 1937. SOUTH AND EAST COASTS OF KOREA, EAST COAST OF SIBERIA, AND SEA OF OKHOTSK PILOT. Ed. 3.
4. ———. 1937. CHINA SEA PILOT, VOL. 3 COMPRISING THE COAST OF CHINA AND MANCHURIA FROM LOKAI POINT TO THE ORYOK-KU KO; THE NORTHERN COAST OF LUZON; FORMOSA; AND THE WESTERN COAST OF KOREA.
5. ———. 1942. CHINA SEA PILOT, SUPPLEMENT NO. 4.
6. ———. 1943. SUPPLEMENT NO. 5 RELATING TO THE SOUTH AND EAST COASTS OF KOREA, EAST COAST OF SIBERIA AND SEA OF OKHOTSK PILOT.
7. [REDACTED]
8. Heiban Sha. 1935. DAI HAYKK JITEN (Dai Hyakka Encyclopedia). Vols. 8, 11, 17.
9. Japan, Hydrographic Department. 1 Sept. 1932. SUIRŌ YŌHŌ (Notices to Mariners).
10. ———. 1933. CHŌSEN ENGAN SUIRŌSHI, TŌGAN OYOBI NANGAN (Sailing Directions for Korea, East and South Coasts). Vol. 1.
11. ———. 1934. CHŌSEN ENGAN SUIRŌSHI, SEIGAN (Sailing Directions for Korea, West Coast.) Vol. 6B.
12. ———. 1938. SUIROKU FUROKU (Supplement to Notices to Mariners). Vol. 2.
13. ———. 1940. CHŌSEN ENGAN FUROKU, SEIGAN (Supplement to Sailing Directions for Korea, West Coast).
14. ———. 1941. CHŌSEN ENGAN FUROKU, TŌGAN OYOBI NANGAN (Supplement No. 6 to Sailing Directions for Korea, East and South Coasts).
15. ———. 1941-1944. SUIRŌ KOKUJI (Notices to Mariners). Classified.
16. ———. 1941-1944. SUIRŌ KOKUJI (Notices to Mariners).
17. Kozō Sha. 1930. NIHON CHIRI TAIKEI (Outline of the Geography of Japan). Vol. 12.
18. Nagai, Shoichiro. June 1938. CEMENT INDUSTRY IN KOREA AND MANCHOUKUO. The Far Eastern Review, Vol. 34, pp. 223-225.
19. Shinkō Sha. 1931. NIHON CHIRI FUZOKU TAIKEI (Outline of the Geography and Customs of Japan). Vol. 17.
20. U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, Far Eastern Unit. 2 Aug. 1943. PRELIMINARY ECONOMIC SURVEY OF KOREA.

25X1

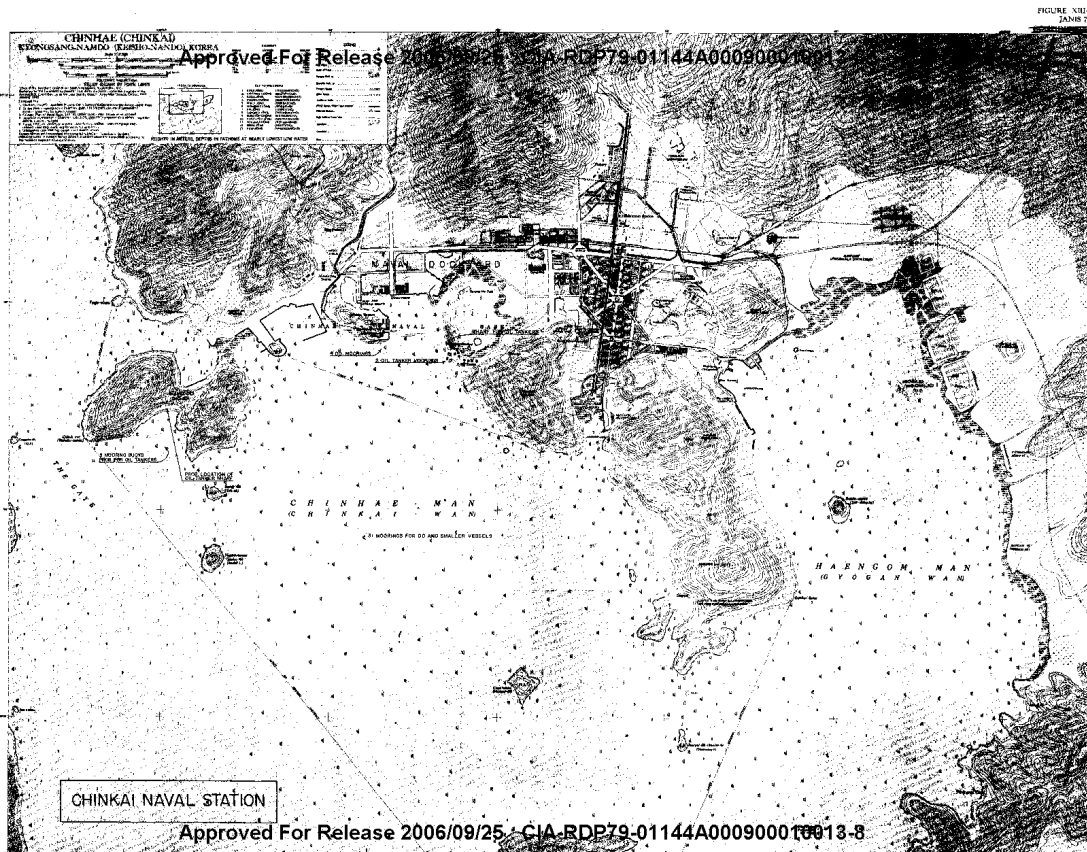
21. U. S. Department of Justice, War Division, Economic Warfare Section.
 - 1 July 1942. Dr. Fritz Hansgirg. MEMORANDA CONCERNING INTERVIEWS ON MAGNESIUM IN JAPAN AND MAGNESITE IN AUSTRIA.
22. U. S. Library of Congress.
 - 27 Dec. 1943. QUELPART AND DAGELET ISLANDS—A COMPARATIVE STUDY. Studies of Migration and Settlement, Translation Series, No. T-3C. Translated and summarized from Dr. Hermann Lautensach, QUELPART UND DAGELET. Wissenschaftliche Veröffentlichungen, Nos. 1-4, Leipzig, 1932-1936.
23. U. S. Navy Department, Hydrographic Office.
 1932. SAILING DIRECTIONS FOR SIBERIA AND CHOSEN, HO 122.
24. ———.
 1944. Supplement to Hydrographic Office Publication No. 122. SAILING DIRECTIONS FOR SIBERIA AND CHOSEN.
25. U. S. Office of Strategic Services, Far Eastern Section.
 - 5 Aug. 1942. KOREA, ECONOMIC SURVEY.
26. U. S. War Department, General Staff, Military Intelligence Service.
 - 15 June 1943. SURVEY OF KOREA.
27. U. S. War Department, Intelligence Branch G-2.
 - 21 Feb. 1942. OBJECTIVE FOLDER, KOREAN NITROGEN FERTILIZER CO.
28. U. S. War Department, Office of the Assistant Chief of Air Staff, Intelligence.
 - 12 Aug. 1944. AIR OBJECTIVE FOLDER, KOREA AREAS, NOS. 84.1 to 84.8.

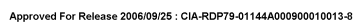
MAPS AND CHARTS

29. Yoshida, Togo.
 1938. DAI NIPPON CHIMEI JISHO, VOL. CHUKOKU (Greater Japan Geographical Dictionary). pp. 1,625, 1,632, Ed. 3. Tanshiki Insatsu K. K. (Tanshiki Publishing Co.).
30. Japan, Hydrographic Department.
 - CHARTS OF KOREA.
31. Japan, Imperial Land Survey.
 - KOREA TOPOGRAPHIC SHEETS. Scale 1:50,000.
32. ———.
 - KOREA TOPOGRAPHIC SHEETS. Scale 1:200,000.
33. U. S. Navy Department, Hydrographic Office.
 - CHARTS OF KOREA.
34. U. S. War Department, Army Map Service.
 - AMS L551 MAPS OF KOREA. Scale 1:250,000.
35. ———.
 - Dec. 1944. CHART 340660. Scale 1:12,500.
36. ———.
 1944. MAP OF VLADIVOSTOK, No. 5301. Scale 1:1,000,000.

OTHER SOURCES

Aerial and ground photographs.
Miscellaneous material from files of Far Eastern Section, Office of Naval Intelligence, U. S. Navy Department.





Published by

THE JOINT INTELLIGENCE STUDY PUBLISHING BOARD

Military Intelligence Division, G-2

Division of Naval Intelligence

Office of Assistant Chief of Air Staff, Intelligence

Office of Strategic Services

Office Chief of Engineers

AT WASHINGTON, D. C.